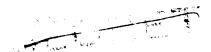


F. 790

12 August 1957

MEMORANDUM FOR: CHIEF,	TEG/AUDIO SUPPORT DIVISION	
THRU : ASSISTA	ant Chief, T88/RAD ant Chief, T88/TA	
SUBJECT : Equipment Report	ent Submitted for Operational Evaluation; on	
1. Submitted here	ewith is report on the RCA UMTR-1 Radio Transmitt	er-
Receiver and the RCA UM	TR-1 Modified Transmitter-Receiver.	
2. Should you have	ve any questions, please contact	25X1
		25 X 1
	// LK	
		25 X 1
	T88/APD	
APPROVED:		٠
ACTIES CHIEF, TES/APD		
Distribution:		25X
Addresses - Orig. &	1	
T88/SFB - 1 T88/APD - 2		
TSS/APD/WLS:1s (12 Aug)	57)	
and to all manages / see /		

SECT



REPORT ON EQUIPMENT SUBMITTED FOR OPERATIONAL EVALUATION

1. HAME OF DEVICE

- a. RCA UMTR-1 Radio Transmitter-Receiver
- b. RCA UMTR-1 Modified Transmitter-Receiver

2. APD PROJECT MURBER, CONTRACTOR, AND CONTRACT MURBER

P-79C - Radio Corporation of America - PSC-302

3. CLASSIFICATION AND STERILITY

Equipment-Unclassified, Agency Interest-SECRET, Agency Sterile

4. HUMBER OF DEVICES SUBMITTED FOR EVALUATION WITH THIS REPORT

- a. 3 UMTR-1
- b. 6 UMIR-1 Modified
- c. 50 Spare Batteries

5. ADDITIONAL NUMBERS ON HAND

- a. 3 UMTR-1
- b. 6 UMTR-1 Modified
- c. 50 Spare Batteries

6. FUTURE DELIVERY, IF ANY

Hope

7. ADDITIONAL PROCUREMENT PLANS, IF ANY

None. This is a limited-production commercial item, of which we have obtained the maximum available. Further production plans are indefinite.

8. REQUIREMENT SOURCE AND DATE

None

9. PERTINENT REFERENCES

None





-2-

10. GENERAL PURPOSE OF DEVICE

Short-range two-way radio communication. All equipments furnished operate on 51.0 mc/s, using frequency modulation. The frequency deviation and stability are such as to be compatible with the military AM/PRC-10; where operating considerations permit an AM/PRC-10 should always be used at one end of the communication circuit in order to obtain the maximum range.

11. UNUEUAL FRATURES AND OUTSTANDING CHARACTERISTICS

The UMTR-1 is the normal commercial version. It is designed for handheld operation and the operator must speak at a normal tone of voice directly into the microphone to obtain useful output. The UMTR-1 modified has been changed so as to more nearly meet the requirements for body-concealed operation. Additional amplifiers permit picking up conversations at several feet from the microphone. The receiving circuit can be disabled for missions involving only clandestine pickup.

12. KNOWN LIMITATIONS AND SHORTCOMINGS

Between identical sets the range is only about $\frac{1}{4}$ mile in the open, and will be less in a built-up area, unless an AN/PRC-10 is used at one end. The equipment is not especially rugged. Maintenance is difficult and requires special equipment and the services of an expert. Most alignment and repair operations can be performed only at the constructor's plant in Camden, New Jersey.

13. STATUS OF OPERATING INSTRUCTION NAMUAL

Operating instructions are supplied with each equipment. There are no spares.

14. STATUS OF SERVICE AND MAINTENANCE MANUAL INCLUDING CIRCUIT DIAGRAMS

There are no service instructions other than information on replacing batteries. A circuit diagram is supplied in the UMTR-1 modified operation instructions.

15. STATUS OF SPECIFICATIONS AND MANUFACTURING DRAWINGS

None

16. REPORT OF TECHNICAL TESTS AND EVALUATIONS AND WHERE AVAILABLE

Technical tests other than those performed by the contractor have not been conducted, but it is anticipated one or more sets will be furnished TSL for technical evaluation.





17. SUGGESTED OPERATIONAL TESTS

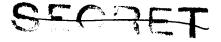
Range and clarity of reception under various operational conditions, both between UMTR-1's and to an AM/PRC-10.

18. IN ADDITION TO REPORT ON OPERATIONAL TESTS, COMMENTS ARE REQUESTED ON THE FOLLOWING SPECIFIC PLATURES

Utility of the various microphone/earphone options permitted with the UMTR-1 modified. Suggestions for improved operating convenience.

19. PROJECT ENGINEER AND CONTACT IN APD FOR ADDITIONAL INFORMATION

20. REPORT ON OPERATIONAL EVALUATION REQUESTED within 2 months.



Contibliance

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